

Takasi YAMAZAKI*: **Three new taxa of *Pedicularis***
from Nepal and Tibet

山崎 敬*: ネパール・チベットからの新しいシオガマグキ属植物三種**

During the study of the materials of the Scrophulariaceae collected by Mr. Ekai Kawaguchi from southern Tibet in 1914 and the 6th Botanical Expedition to the Himalayas in 1977, I found three new taxa of *Pedicularis*, which will be described in this paper.

Pedicularis kawaguchii Yamazaki, sp. nov. (Ser. Cheirantifoliae). Fig. 1 and Fig. 3; a, b.

Caulis erectus simplex, 20-30 cm altus, 4-striatus, 4-seriate breviter crispulo-pubescent, internodis foliis longioribus 4-10 cm longis. Folia 4-verticillata, 3-4 juga, petiolis 1-2 cm longis subtus glabris, supra ad costam breviter pubescentibus, laminis oblongo-lanceolatis, apice acutiusculis, basi truneatis, pinnatisectis, utrinque glabris, sed supra ad costam semper pubescentibus, inferioribus 4.5 cm longis 1 cm latis sursum minoribus, superioribus 2.5 cm longis 0.5 mm latis, segmentis oblongis 10-15 jugis, apice obtusis, margine leviter crenatidentatis. Racemi spiciformes, 7-9 cm longi 3-4 cm lati, multifloriferi. Flores 4-verticillati patentes. Bracteae inferiores foliiformes pinnatipartitae, superiores lineari-lanceolates vel lineares apice obtusae margine minute crenatae, calycibus longiores vel subaequilongae, sparse albo-pilosae. Pedicelli ca. 1.5 mm longi sparse pilosi. Calyx tubulosus 7 mm longus 3 mm latus, sparse albo-pilosus, antice triente fissus, apice 3-lobatus, lobis lateralibus flabellatis 2 mm longis 3 mm latis bifidis et irregulariter arguti-dentatis, lobo postico minimo oblanceolato, 1.5 mm longo 1 mm lato, paucidentato. Corolla ca. 20 mm longa, tubo in calycem geniculato, superiore ampliato, calycem duplo superante, ca. 14 mm longo 2 mm lato, galea incurva ca. 8 mm longa, in partem antherigeram 3 mm lata, parte basali reflexa, parte antherigera fronte in rostrum deorsum spectans brevissimum conicum apice rotundatum abeunti, labio inferiore dilatato ca. 10 mm longo 13 mm lato 3-lobato, lobo medio depresso-orbiculato ca. 4.5 mm longo

* Botanical Gardens, Faculty of Science, University of Tokyo, Hakusan 3-chome, 7-1, Bunkyo-ku, Tokyo 112. 東京大学理学部附属植物園.

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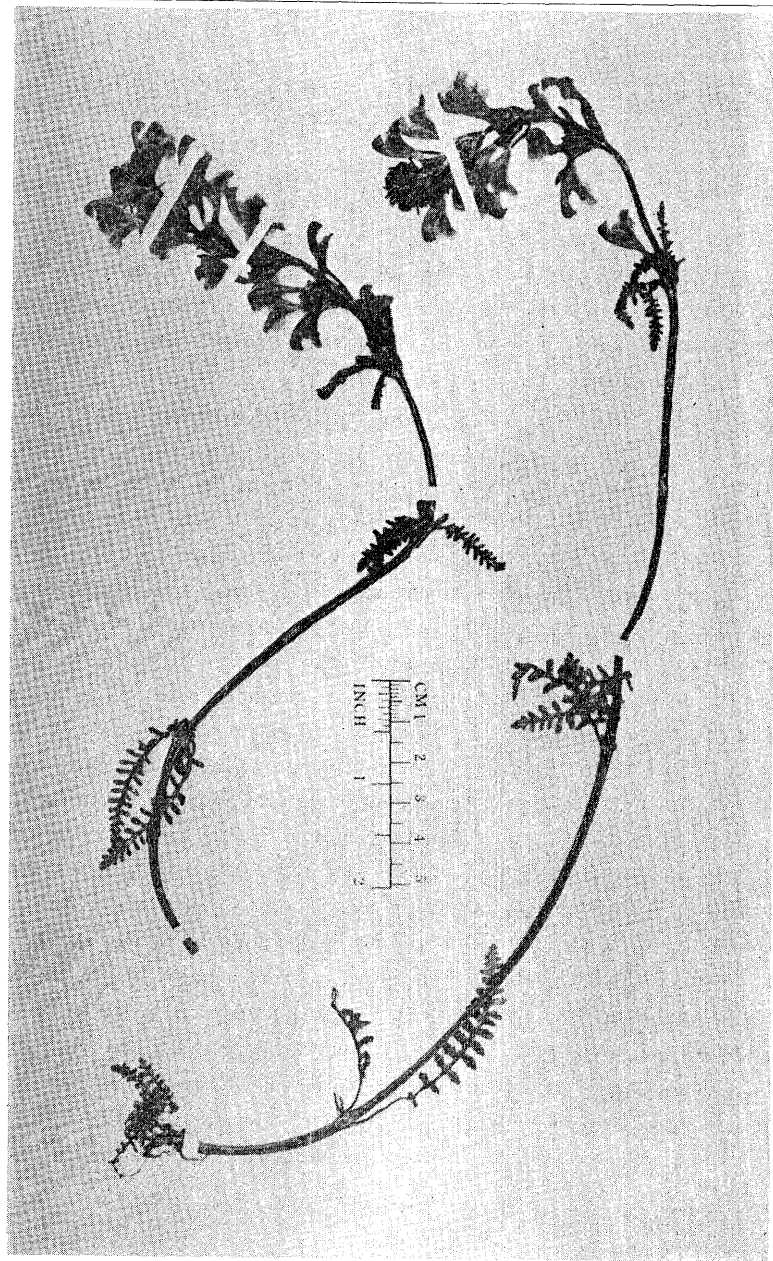


Fig. 1. *Pedicularis kawaguchii* Yamazaki (Kawaguchi, no. 39, type in TNS).

6 mm lato, lobis lateralibus dilatato-orbiculatis ca. 4.5 mm longis 7.5 mm latis. Stamina subdidynama, filamentis glabris, antheris ovato-ellipticis ca. 2 mm

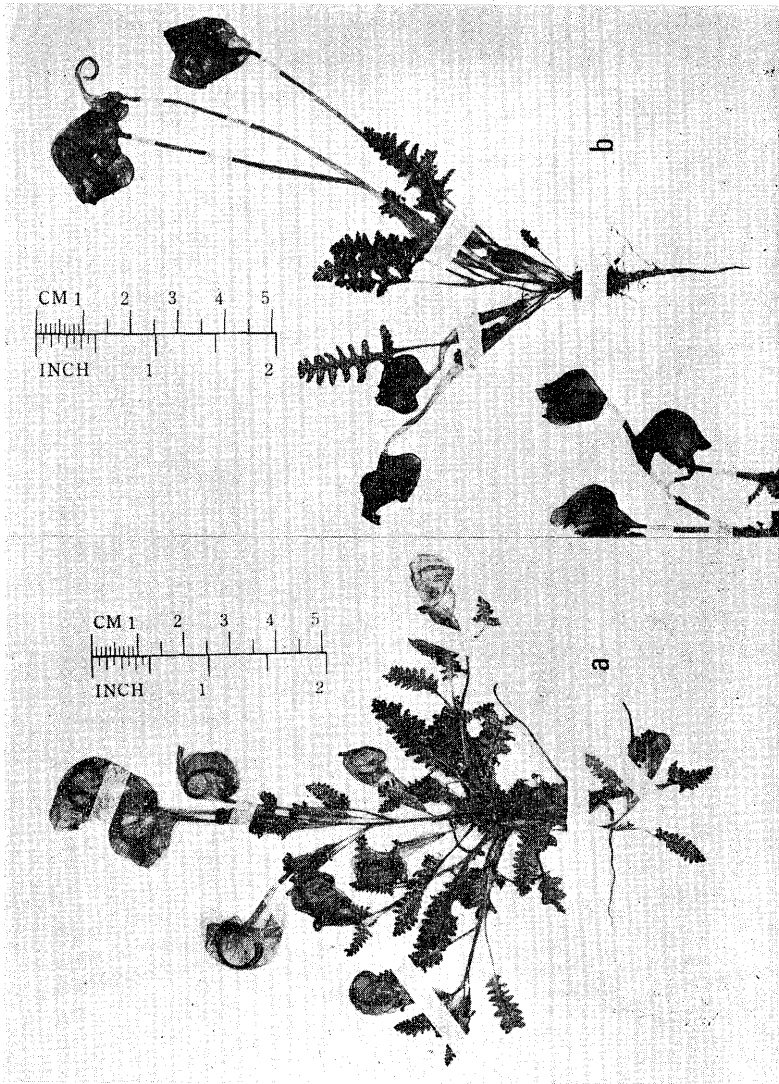


Fig. 2. a. *Pedicularis cornigera* Yamazaki (Ohashi et al., no. 775068, type in TI). b. *P. melowhila* Li ssp. *longituba* Yamazaki (Ohashi et al., no. 770730, type in TI).

longis 1 mm latis, loculis basi acutis.

Hab. Tibet. Shigatse, Tashi-rumpu temple (E. Kawaguchi, June 18, 1914, no. 39, type in TNS).

Vernacular name. Rukura-marho 羊角赤花 (by E. Kawaguchi).

This species is resembles *P. cheilanthifolia* ssp. *nepalensis*, but differs from

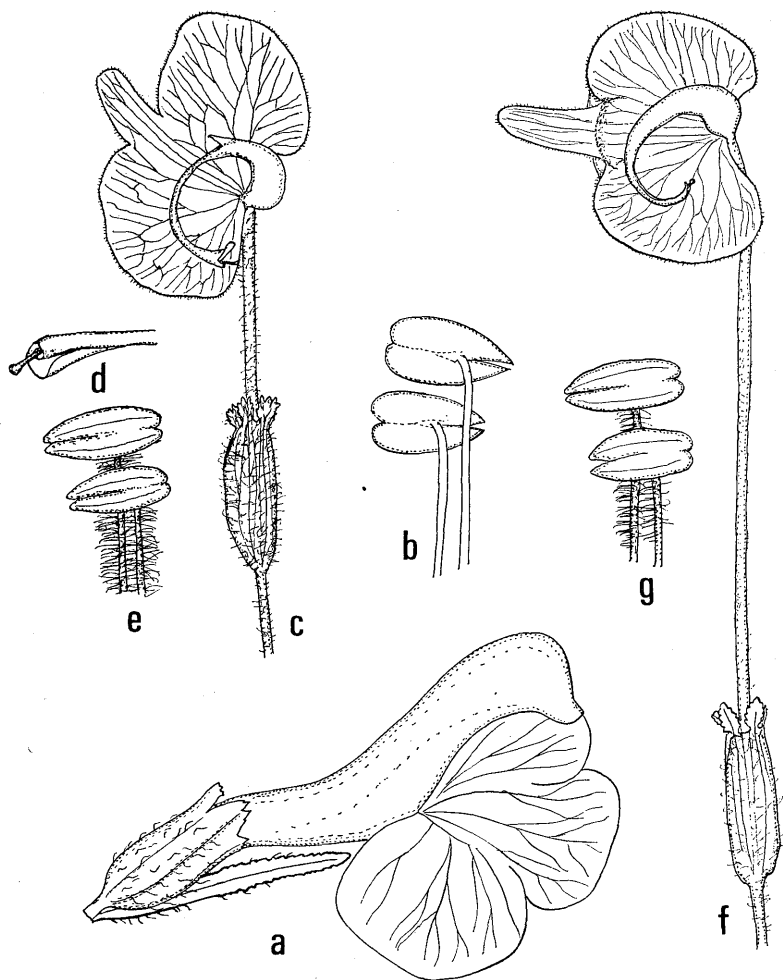


Fig. 3. a, b. *Pedicularis kawaguchii*. c-e. *P. cornigera*. f, g. *P. megalochila* ssp. *longituba*. a, c, f; flower. b, e, g; stamens. d, apical part of galea. a, $\times 3$. c, f, $\times 1.3$. b, $\times 2$. e, g, $\times 5$.

the latter by the robust form, the segments of leaves shallowly crenate-dentate and obtuse at the apex, the bracts linear or linear-lanceolate shallowly crenate-dentate and the lower lip of corolla major.

Pedicularis cornigera Yamazaki, sp. nov. (Ser. *Rhinanthoides*). Fig. 2; a, 3; c-e.

Herba perennis, 5-20 cm alta. Radix cylindrica subcarnosa, radicellas fibrosas paucas emittit. Caules 2-10 fasciculati, erecti vel ascendentes, simplices, patente albo-lanati. Folia alterna raro opposita, petiolis 1-4 cm longis sparse patente lanatis, laminis oblongo-lanceolatis, 1-5 cm longis 0.5-2 cm latis, utrinque albo-pubescentibus, apice acutiusculis, basi truncatis in petiolum breviter attenuatis, margine profunde pinnatifidis, segmentis 6-10 jugis, triangulari-ovatis, grosse crenati-serratis. Flores in axillis foliorum superiorum solitarii, longe pedicellati, pedicellis 5-10 mm longis sparse pubescentibus. Calyx tubulosus, 13-17 mm longus 4-5 mm latus, apice 5-lobatus, tubo membranaceo albo-lanato, antico usque ad medium fisso, lobis in sicco nigrescentibus pubescentibus, 4 lateralibus ovatis vel ovato-flabellatis breviter stipitatis, profunde irregulariter crenati-dentatis, 2-4 mm longis 1.5-3 mm latis, lobo postico minore obovato vel oblongo-oblancheolato 1-2 mm longo paucè crenati-dentato. Corolla lutea cum galea purpurea, 4-6 cm longa, tubo recto gracili 3-5 cm longo 1.5 mm lato, sparse lanato, galea glabra, ca. 2 cm longa, in parte antherigera ca. 3.5 mm lata, versus basin leviter torta, apice in rostrum circinatum abrupte producta, restro gracili ca. 15 mm longo, postico cornifero, apice rotundato leviter dilatato, cornu deltoide-acuminato ca. 1 mm longo, labio inferiore dilatato, 18 mm longo 25 mm lato, margine subtiliter ciliato, lobis lateralibus dilatato-orbiculatis ca. 7 mm longis 15 mm latis, lobo medio minore lineari-oblongo ca. 6 mm longo 3 mm lato, apice rotundato-truncato. Stamina ad tubi apicem affixa, filamentis omnibus dense villosis, antheris ellipticis 3 mm longis 1.5 mm latis, loculis basi subacutis. Capsula ignota.

Hab. Eastern Nepal. Lamni Nama, alt. 4200-4900 m (Ohashi, Kanai, Ohba & Tateishi, Aug. 15, 1977, no. 772407, type in TI, Aug. 14, 1977, no. 775068, TI), Thudam—Lamni Nama, 4000 m, river side (Ohashi et al., Aug. 14, 1977, no. 770764, 770765, 773735, TI), Lamni Nama—Phujeng La, 4300 m, on sunny grassy slope (Ohashi et al., Aug. 16, 1977, no. 770851, TI).

This species resembles to *P. megalochila* Li var. *ligulata* Tsoong of S.E. Tibet, but differs from the latter by having the longer galea with a horn at

the posterior surface and all the filaments being densely villose.

Pedicularis megalochila Li subsp. **longituba** Yamazaki, subsp. nov. Fig. 2; b. 3; f, g.

Corolla purpurea, tubo gracili 5-7 cm longo 1.5 mm lato, sparse piloso; galea ca. 2 cm longa apice in rostrum 15 mm longum gracilem transeuns; lobus medius labii inferi liguliformis, 10 mm longus 4 mm latus.

Hab. Eastern Nepal. Thudam—Lamni Nama 3500-4000 m (Ohashi, Kanai, Ohba & Tateishi, Aug. 14, 1977, no. 770760, type in TI).

P. megalochila has been treated as a member of the ser. *Megalanthae* which is characterized by the annual herbs with stout erect stems and the leaves being generally cauline. *P. megalochila* and *P. cornigera* are perennial herbs with the slender erect or ascendent stems, the leaves tending clustered near the base and the calyx 5-lobed. These characters agree with those of the ser. *Rhinanthoides*.

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河口慧海氏が1914(大正3)年の春から秋にかけて、チベット南部のシガツェからラッサの間で採集されたものと、1977年の第6回東京大学ヒマラヤ調査隊が採集した東ネパールのゴマノハグサ科植物の整理をした中から、シオガマギク属植物の新しいものが見つかったのでここに報告する。

Pedicularis kawaguchii. 河口氏は1914年1月から7月までシガツェに滞在していたが、そこのタシルフンブー寺で採集したシオガマギク属の植物は *P. cheiranthifolia* に近縁のものであるが全く異り、新種と思われる。チベットから多数の標本を日本に持ち帰られた同氏を記念して学名とする。

Pedicularis cornigera. 東部ネパールの 4000 m の高地で採集されたこの植物は細長い花筒の先に大きな黄色の下唇が広がり、その中に紅紫色の上唇を包んでいる特異な花形のもので、上唇の上側に角があるのが特徴である。

Pedicularis megalochila ssp. *longituba*. 東部ネパールの 4000 m 付近にあるこの植物はビルマ北部、チベット東南部、ブータン東部にまで分布する *P. megalochila* によく似ているが、花筒がいちじるしく長く、花冠上唇がより細長く、下唇の中央裂片が舌状である点が異なる。別種としてもよいほどであるが、*P. megalochila* は変化の多い種類らしいので地域的に異なる亜種として報告する。*P. megalochila* は今後もっと調査する必要のある種類である。